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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,289	01/31/2002	Bing Zhou	15913.23	2043

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EXAMINER

NGUYEN, CAM N

ART UNIT PAPER NUMBER

1754

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/066,289

Applicant(s)

Zhou et al.

Examiner

Cam Nguyen

Art Unit

1754



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 7/18/03 (an election).
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 2, 4-17, and 19-21 is/are allowed.
- 6) ☒ Claim(s) 3 and 22 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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### **DETAILED ACTION**

1. Applicant's election without traverse of Group I invention, claims 1-21, in Paper No. 5 is acknowledged.

2. This application contains claim 22 withdrawn due to nonelected (distinct) invention. However, since the elected product claims are now found allowable, claim 22 has now been rejoined with the Group I invention.

Claims 1-22 are pending and currently under examination.

### ***Claim Objections***

3. Claim 18 is objected to because of the following informalities: A period -- . -- is missing at the end of the claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112 (First Paragraph)***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claim 22 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 22 recites “treating the naphtha with the catalyst of claim 1 under reforming conditions” in line 2. However, the instant disclosure does not provide support for “reforming conditions”. Thus, this limitation is not commensurate within the scope of applicants’ disclosure.

***Claim Rejections - 35 USC § 112 (Second Paragraph)***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3 & 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. Claim 3 recites the limitation "the substrate" in line 1. There is insufficient antecedent basis for this limitation in the claim.

B. Regarding claim 22, recitation of “reforming conditions” is unclear as to what reforming conditions is the process performed at or the instant specification does not set forth the conditions for reforming processing of the naphtha in the claim. Thus, renders the claim vague and indefinite.

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***Reasons for Allowance***

8. The following is an examiner's statement of reasons for allowance:

As concern with claims 1-14, the prior art does not disclose or fairly suggest a supported noble metal catalyst comprising nanometer-sized crystal particles contained on a support material within a matrix comprising a particle-to-support control and binding agent, said particle having a preponderance of (111) type crystal phase on the face of the noble metal particles. While supported noble metal catalysts are known in the art, a particular catalyst having a preponderance of (111) type crystal phase and nanometer-sized crystal particles in combination with a matrix comprising a particle-to-support control and binding agent distinguishing over the prior art.

As concern with claims 15-21, the prior art does not disclose or fairly suggest a process of preparing a supported noble metal catalyst having a preponderance of (111) type crystal phase and nanometer-sized crystal particles in combination with the use of a metallo-organic sequestering agent to make the catalyst having the characteristics as described.

While US Pat. 6,168,775 B1 discloses similar catalyst and process of making a catalyst as being claimed, it does not teach a supported noble metal catalyst including “a matrix comprising a particle-to-support control and binding agent” (as recited in applicants’ claim 1) or it does not teach to “prepare solution of a noble metal salt with a metallo-organic sequestering agent” (as recited in applicants’ claim 15). There is no motivation to combine the teachings of the references together.

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### *Citations*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Zhou et al. (US Pat. 6,534,661 B1), Andolfatto et al. (US Pat. 6,194,338 B1), Itoh et al. (US Pat. 5,024,905), Itoh et al. (US Pat. 5,096,866), Freund et al. (US Pat. 5,767,036), Wanngard (US Pat. 5,961,948), Birbara et al. (US Pat. 5,698,488), Kitson et al. (US Pat. 5,061,671), Puskas et al. (US Pat. 4,476,242), Xing et al. (US Pat. 6,518,217 B2), Kunz (US Pat. 4,028,274), & Hucul (US Pat. 4,713,363) are cited for related art.

### *Conclusion*


10. Claims 1-22 are pending. Claims 3 & 22 are rejected. Claim 18 is objected. Claims 1-2, 4-17, & 19-21 are allowed.

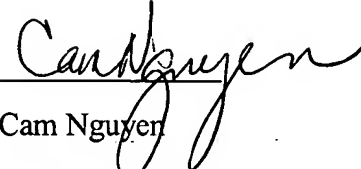
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Cam Nguyen, whose telephone number is (703) 305-3923. The examiner can normally be reached on M-F from 8:30 am. to 6:00 pm, with alternative Monday off.

The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 (before finals) and (703) 872-9311 (after-final).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Nguyen/cnn   
September 26, 2003

  
Cam Nguyen  
Patent Examiner  
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